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ABSTRACT

A study was conducted to shed light on the influence which children's developmental stage in learning to read and the reading instruction they receive have on first-graders' reading concepts. The study provided descriptive information to answer the following questions: (1) Do children from literature-based and skill-based instructional settings differ in their concepts of reading? (2) If the children do differ in their concepts of reading, to what extent and in what ways do they differ? Twenty-four white, first-grade children (average readers) participated in the study. The study utilized a range of instruments including structured interviews, Altered Passages, and Running Record Analysis. Findings indicated that both development in the stage of learning to read and type of instruction play a role in beginning readers' concepts. Similarities in the two groups indicated that the influence of development in learning to read cuts across instructional contexts. The results also indicated that these beginning readers attended to and successfully used graphophonic relationships in print whether or not their reading instruction focused on traditional, systematic teaching of phonic skills. Results revealed that metacognitive differences between the literature-based and skill-based students varied according to instruction--the breadth of metacognitive understanding was much greater for the literature-instructed students. Findings support the claim that instruction makes a difference in students' reading schemata. (One figure and four tables of data are included and 46 references are attached.) (MG)

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Children's Concepts of the Nature and Purpose of Reading in Different Instructional Settings

Penny A. Freppon

Students' beliefs about the fundamental nature and purpose of reading guide reading behaviors and are crucial to the process of learning to read. (Adams & Collins, 1977; Anderson, 1976, 1977; Bransford, 1979; Goodman, Smith, Meredith & Goodman, 1987; Smith 1986). A substantial body of reading research is grounded in schema theory. More than 20 years of research on student's reading schemata has shown that variables such as age, socioeconomic status, reading achievement, and to some degree, gender act as determinants of children's ideas about the purpose and nature of reading. (Canney & Winograd, 1979; Denny & Weintraub, 1963, 1966; Downing, 1973, 1978; Downing, Ollia & Olive, 1975,1977; Edwards, 1962; Johns & Ellis, 1976; Schneckner, 1976). Many of these studies claim that instruction is also influential and further, that traditional (skill-based) reading instruction leads to formation of reading concepts which may lack a strong sense of the communicative or meaning-based purpose of reading. However, studies specifically designed to explore the possible effect of instruction on children's reading concepts are lacking.

Several strands of research related to reading schemata were of interest in this study of children's concepts of reading. Among these are (1) the possible influence of development and attention in learning to read on children's reading concepts and (2) the suggestion that instruction may influence reading concepts.

Attention, regarded as a complex, flexible, and limited mental resource (Gibson & Levin, 1978; Posner & Snyder, 1975) is directed by the reader. Children in the early stages of learning to read, having as yet to

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achieve automaticity (LaBerge & Samuels, 1974), are considered to be in the process of becoming aware of a variety of factors involved in the reading process. For example, students may attend to single aspects of print, such as graphophonic relationships, during a specific period or periods in the process of learning to read. By investigating the concepts held by average readers the present study provided a look at the possible influence of development which may shape reading schemata.

Biemiller's, (1970) research delineates three stages of reading behaviors. His study showed that first-grade students initially attend to meaning or contextual information available in the text, then to graphophonic features of print, and finally move to a focus on graphophonic features and meaning which integrates both decoding and comprehending behaviors. According to Biemiller, children remain at the "graphophonic stage" until they have mastered decoding and are then ready to move into using both meaning and graphophonic information available in the text. Other, classic, reading research (Chall, 1983; Mason, 1977) contributes to the notion that a rather linear focus of attention typifies certain developmental stages of learning to read.

However, researchers such as Barr (1972, 1974-75), DeLawter, (1970), and Cohen (1974-75) indicate that instruction may be instrumental in determining children's reading concepts and strategies and thus their focus of attention. These early studies, however, are limited by problems associated with ecological validity. In addition, much of the research on children's reading concepts, behaviors, and the possible influence of instruction or development took place prior to the inception of literature-based or whole language practice. It is also possible that in previous studies efforts to make comparisons of 'look-say', 'language expeience', and

'phonic' or 'code-emphasis' methods rested on insufficent methods of instructional identification. Recent research, conducted in literature-based/whole language classrooms, on young children's writing indicate that the instructional setting has significant influence on writing concepts and behaviors (DeFord, 1984; Moss, 1983).

In summary, formation of children's reading concepts is not clearly understood. Some research indicates that beginning readers exhibit a focus on various aspects of print, i.e. meaning or graphophonic relationships, during specific periods of development in learning to read (Biemiller, 1970). Other research suggests that the influence of instruction or the instructional environment which emanates from the teacher's theoretical orientations may be instrumental in reading concept acquisition (Canney & Winograd, 1979; Denny & Weintraub, 1963, 1966; Downing, 1973, 1978, Johns & Ellis, 1976). Presently, it is unclear whether attention to graphophonic aspects of print or to meaning is influenced by instruction or is characteristic of development in early stages of learning to read.

Overview of the Study and Research Questions

To date research of children's reading concepts lacks investigations which clearly aim at teasing apart the influence of development in learning to read and the influence of reading instruction. This quasi-experimental study was designed to shed light on the influence the stage of learning to read and reading instruction has on first-graders' reading concepts. Of central concern in the present study was the identification of possible differences in the reading concepts of children who were in disparate instructional settings and at a highly similar developmental stage of learning to read.

The intervening variables (such as socioeconomic status, gender, reading ability, and age) known to affect reading concepts were controlled. To better understand the roles of development in learning to read and of reading instruction the present study provided descriptive information to answer the following questions: (a) Do children from literature-based and skill-based instructional settings differ in their concepts of reading? And (b) If the children do differ in their concepts of reading to what extent and in what ways to they differ?

METHOD

Research Sites and Selection of Instructional Settings

Two elementary school districts located within 20 miles of each other in a mid-western metropolitan area of moderate size were selected as research sites. Similarity of student populations in both districts was documented by school records including (a) over 90% white and (b) less than 4% of the children qualifying for free or reduced lunch. Similarity of the two school communities was further documented by (a) median incomes and (b) median housing values which were determined by real estate statistics and the most recent census data.

This study utilized a multi-step process which identified teachers' theoretical orientations and guided final selection of the two skill-based and two literature-based classrooms. To begin the process school administrators recommended "excellent" skill-based or literature-based teachers who expressed keen interest in their students. These selected teachers also described themselves as skill-based or literature-based.

A high degree of consistency on three measures provided additional guidance in classroom selection. Instrumentation included the Theoretical Orientations Reading Profile (TORP) (DeFord, 1979), structured interviews, and in-depth classroom observations. All data used in identifying the two skill-based and two literature-based classrooms were audited by three trained doctoral students. Inter-rater agreement was 100%. Specific criteria used in the identification process were as follows.

Adhering to the guidelines set by DeFord (1979) the selected skill-based teachers' scores on the TORP fell in the 85-94 range and the literature-based teachers' scores were in the 120-140 range. Teachers' responses to audio-taped interview questions were analyzed and coded as either skill-based or literature-based. A majority of codings in skill-based or literature-based categories designated the teacher as consistent or inconsistent with her self-identified theoretical orientations, the scores on the TORP, and observed classroom teaching behaviors.

Classroom observations were conducted and reading instruction was audio-taped and analyzed in several ways. Information on specific teaching behaviors and students' responses included the following: (a) oral and silent reading and the nature and amount of discussion, (b) assigning workbook pages and worksheets and holding skill and literature response activities, (c) conducting round robin oral reading, partner or choral reading, and specific teaching techniques such as voice print matching, prediction, and word accuracy.

Following the guidelines of previous studies (DeFord, 1984; Moss, 1983) the management of time, use and kind of reading materials, descriptions of displays on the walls and nearby areas, and grouping for instruction were also charted and served as an additional check of

instructional theory and practice. Periodic classroom observational checks were made throughout the study.

Informants

Twenty-four white, first-grade children participated in the study. Six students (three boys and three girls) were drawn at random from the pool of average readers in each of the four classrooms. Because the goal of the study was to look at children in similar stages of learning to read in varying instruction it was necessary to establish a pool of average readers. Reading ability was determined by consistency of (a) reading comprehension scores on the Stanford Achievement Test (1982), (b) teacher judgment, and (c) school records including information used to identify students in remedial programs, report cards, and reading group membership (where appropriate).

Not unexpectedly for this population, most test scores for students in all four classrooms fell into the sixth, seventh, and eighth stanines on the reading comprehension test. Through discussions with the four teachers the sixth and seventh stanines were selected to be the middle range for these students. The final selection for the pool of average readers was extended to students in the sixth and seventh stanines in the literature based classrooms and in the seventh stanine in the skill-based classrooms.

Data on literature-based students' reading concepts were gathered from February through April of the school year.

Instrumentation

Previous investigations of children's reading schemata relied primarily on structured interviews. Exclusive use of this instrument with young children lacks breadth and is somewhat problematic. Therefore the

present study utilized a range of instruments. Structured interviews (taken in part from Burke (1980) presentations of several selections of incomprehensible print, hereafter refered to as Altered Passages (Canney & Winograd, 1979), and Clay's (1979) Running Record analysis of two samples of oral readings provided triangulation of data. Altered Passages were presented in random order and were counter balanced with interviews. All children read the stories in the same order.

Because it is sometimes difficult for first-graders to articulate their thoughts when asked to describe or define reading, and since it was important to discern whether or not the students in the skill and literature-based classrooms differed in their basic concepts of reading two closed questions were added. *What's more important in reading, getting all the words right or understanding the story?* and *Is reading thinking about the story in your mind or saying all the words right?*

The Altered Passage instrument (Canney & Winograd 1979) consists of five passages. One passage is intact and makes sense. Three passages are altered in various ways to make them incomprehensible. Examples of one such passage and a letter string passage follows.

To bus was it Mrs. the go the.
"In climbed Brown we, bus went
"Children go to ready are got."

Ng kcb xb n lbl. Tnw
p tllt rht dnw ht
Plh n Rw phs lb htng ht.

The original Altered Passages were shortened to three lines each to reduce possible fatigue in first graders. Presentations of an intact passage and those which were incomprehensible were used to gain insight into students' concepts of reading. It is reasonable to infer that children who believe that reading is primarily a communication or meaning-based process would, in some way, find fault with or reject print which did not make sense.

Students read two unfamiliar stories from the 1983 basal series of Holt Reinhart & Winston (level eight and level nine). Analysis of oral reading behaviors using Running Record procedures provided information on specific reading behaviors such as the strategies and cueing systems (meaning, structure, and visual) students used when reading (Clay 1979). In addition to identification of use of meaning, structure or visual cues available in the text the Running Record analysis yields information which helps form a composite or profile of each reader. The profile provides information about the child's level of active searching for meaning and self-monitoring behaviors.

Procedures

The 24 randomly selected students formed Sample One. Sample One students were given counter balanced structured interviews and presentations of randomly selected Altered Passages. A gender balanced subsample of 12 students (six literature-based and six skill-based students) was drawn at random from sample one. These 12 students also read two (basal) stories orally.

Interviews and Altered Passage presentations were conducted in same day sessions with a break between each activity. Story reading took

place during separate sessions. All students read the level eight story first. Children were seen individually in a private, relatively quiet place in the school (storage or speech room). All sessions were audio taped. During the sessions the children were encouraged to select blank tapes with their names on them and to practice taping with the recorder. They were told that their reading and discussions in the session in no way reflected on their school work and that they were helping the investigator with her work. The students were told they were going to talk about reading and do some reading. Notes about individual children were written up after the child had left the area.

All students were asked the interview questions in the same order. If children gave yes or no answers they were asked to elaborate. For example, if the child said *yes* to the question *Are you a good reader?* they were asked how they knew they were a good reader. Prompts were usually unnecessary and if used rarely exceeded two.

When the students were presented with Altered Passages each was told the following. *When some people see this (print) they say it is something a person could read. But other people say it is something a person couldn't read. Look at it and tell me what you think. Is this something a person could read or something a person couldn't read?*

If the child said it was something a person couldn't read s/he was asked why it could not be read. If the child said it could be read s/he was asked to read the passage. If the children did not comment spontaneously during or after reading the passage they were asked if they could read it and if they had any trouble.

During story reading the children were simply asked to read the story as they were handed the book. If the child asked for help s/he was

encouraged to try to "get the word" on her/his own by being told to "Try what you would do if no one was around to help you". The word was given if the child persisted in asking for help or appeared unduly frustrated.

Analysis

One-third of all data on each of the three measures were selected at random for analysis by two interraters who were trained following the technique outlined in Miles and Huberman (1984).

Interviews. Content analysis was conducted on transcribed interviews. Patterns of information were identified, coded and placed in units. For example references to the language-like qualities of reading and discussions about sounding out and learning words were placed in separate units. The final phase of analysis included a comparison and contrast between literature-based and skill based students. Interrater agreement on interview responses was 90%.

Altered passages. Analysis of data on the Altered Passages was done through a frequency count. Student responses were assigned to several categories and collapsed into two primary categories: (a) acceptance of the passage, (the child made no identification of non language-like nature of the passage) and (b) rejection of the passage (the child made some identification of the non-language like nature of the passage such as "Yes, you can read it but the words are all mixed up."). Interrater agreement on rejection or acceptance of the passages was 96%.

Oral reading. Using Marie Clay's (1979) Running Record analysis an outside expert coded oral reading errors and summarized the results in a detailed report which described each student's accuracy rates, the quantity and quality of errors, and basic reading behaviors such as self-correcting. The outside consultant and the investigator then continued to analyze data

identifying the trends within and across both groups. Students were then identified according to skill-based or literature-based group members so that comparisons between the groups could be made. A second outside expert provided an interrater reliability check of error coding using the Running Record analysis with 94% agreement.

RESULTS

Interview

Findings on open-ended interview questions yielded mixed results. Figure one summarizes the similarities and differences found in responses of students in skill-based and literature-based groups. The responses indicate that children in both groups expressed high interest in (a) graphophonic relationships in reading (sounding out words) and (b) learning and knowing words. For example when asked the question *What do you do when you come to a word you don't know*? children in both groups named sounding out most frequently. However, the literature group discussed other strategies such as skipping words and using the context in addition to sounding out words. Figure one provides a composite of students' statements which characterized the literature-based and skill-based groups.

Insert Figure 1 about here

The most obvious difference in interview responses was found in the metacognitive understandings expressed by students. The responses of literature-based students indicated their (a) breadth of knowledge of a variety of reading strategies (b) emphasis on the language-like nature of reading, and (c) flexibility in thinking about functional aspects of

environmental print. Similar responses were not evident in the skill-based group.

The following examples from the literature-based students' interveiws help capture the breadth of their metacognitive understandings.

Q - "How do you know if you read a word wrong?"
A - " You have to see if the sentence feels right."
A - " I know because it doesn't make sense"

Q - "Can you read if you don't have a book?"
A - "Yes, you can read peoples shirts.
A - "You can write your own books. Yes, and airplanes what write up in the sky.
A - Sometimes. You can read T.V.
Like if it's French and it has words on the bottom.
It's just like T.V is a book!

The skill-based group answers to the question, *How do you know if you read a word wrong?* more often involved discussion of sound symbol relationships such as "You can tell by the beginning sound" or "You can look up on the board and see if any letters are turned around." Some students in this group explained that their teacher would tell them if the word was wrong and say, "Read that word again." In responding to the query, *Can you read if you don't have a book?* over 50% of the literature group named more than one item. Less than 10% of the skill-based students named more than one item which could be read. In addition to those shown above, literature-based students discussed a variety of items which can be read such as gift tags, household and automobile items, directions, poetry, letters, and food items. The skill group offered cards, the computer, and paper.

When asked the question *What does a person have to do/learn to be a good reader?* Both the groups had nearly equal numbers of responses pertaining to learning, knowing, and sounding out words. The literature group discussed additional factors such as the importance of thinking hard, reading a lot, and understanding language structure. An example of a literature group response follows; "Before when I made mistakes I would never go back to them. But now I read my library books to my mom and dad and if the sentence doesn't feel right to me I go back, and I look at it, and I keep it up." The skill group discussed factors such as knowing words, getting words right, and reading group membership, i.e. "Now I hardly get any words wrong."

When the students were asked to answer closed questions designed to tap information about their basic views of the nature and purpose of reading, varying patterns emerged. In responding to one question, *What's more important when you read, getting all the words right or understanding the story?*, 92% of the children in the literature group selected understanding the story or both understanding the story and getting words right. In contrast 56% of the students in the skill group selected understanding or both understanding and getting words right. When asked, *Is reading thinking about the story in your mind or saying all the words right?*, 83% of the children in the literature-based group chose thinking about the story or thinking about the story and saying all the words right while 33% of the skill group reponded in this manner.

Altered Passages

All the children in both groups accepted the intact passage as something which could be read. In the literature-based group 42% of the students commented spontaneously that the passage could be read because

of the language-like qualities of the text, noting that it was "Like a story" or that "It makes sense!". Spontaneous comments did not occur in the skill group when reading the intact passage.

Students in both groups rejected the letter string passage as something which could be read. Ninety-two percent of the students in the literature group rejected the passage on the grounds that it could not be read because the words were not 'real' or 'true' or that they didn't spell anything. Sixty-six percent of the skill-based students cited similar reasons for their rejection of the letter strings passage and 33% said the passage could not be read because the words were 'hard' or because they 'didn't know' the words.

Of greatest interest to the present study were students' levels of acceptance or rejection of incomprehensible print presented in three altered passages, i.e. *To bus was it Mrs* Levels of acceptance and rejection for each passage were analyzed using the Fisher Exact test. The literature-based students rejected the passages more frequently than did the skill-based students, $p < .004$, $p < .006$, and $p < .002$ for each passage respectively.

Student's spontaneous comments also provided insight into their perceptions of the purpose and nature of reading. In the literature-based group 66% of the students found the incomprehensible print humorous. That is, they laughed at or made a joke of the Altered Passages. In the skill-based group 16% exhibited a similar response. Additionally, some of the children in the literature group noted that the investigator had tried to trick or fool them in presenting the altered passages as the following examples suggest. One student said, as she quickly handed the passage back in an amused and indignant manner, "Did you just typing this up?!" Another

student, sharing the joke with the investigator, asked her to "Listen to this again!" pointing and laughing as he reread the incomprehensible print.

Oral reading analysis

Running record results indicate that the skill-based and literature-based groups were equal when comparing accuracy rates and nearly equal in the number of times children asked for help. The literature-based and skill-based students were similar in that both groups actually used sounding out as a reading strategy. However, the groups differed in the number of times they attempted to sound out words and in the quality of their substitutions. A summary of information on oral reading behaviors is shown in table three.

insert table 3 about here

Table 3. Accuracy rates, average number of requests for help, quality of errors, and average number of attempts to sounding out words

literature-based				skill-based			
accuracy rate%	H* x	errors %	decoding attempts x	accuracy rate%	H* x	errors %	decoding attempts x
94	1.8	msv 34 ms 25 mv 4 sv 13 v 24	2.8	94	2.0	msv 8 ms 18 mv 0 sv 14 v 60	6.3

H* (requests for help)
* msv (meaning, structure, and visual cues)

The skill-group made more than twice as many decoding attempts as the literature group. Using the Mann-Whitney U test, the differences between the two groups did not reach significance. ($p < .10$, $U = 8.5$). The success rates in sounding out words also differed. The literature group

acheived a success rate of 53% compared to a 32% success rate of the skill group.

Oral reading findings revealed differences in the cueing systems the two groups employed. The literature group's error patterns indicated use of a balanced cueing system (using meaning, structure and visual cues in making substitutions). Seventy-four percent of the skill group's errors were dependent on either visual (v) or structure and visual (vs) cues. Although differences between the two groups' use of visual (v) cues alone failed to reach significance ($p < .20$, $U = 13$) the literature group's use of meaning, structure, and visual (msv) cues was significantly different than that of the skill group ($p < .001$, $U = 3$).

Differences were also found in self-correcting behaviors as indicated by the Running Record results. Skill-based students made more self-corrections than the literature-based students. However, the quality of the self-corrections differed. The skill group had 12% more self-corrections on substitutions which did not disrupt meaning, i.e. the substitutions were semantically and syntatically acceptable. This group also had 13% fewer self-corrections on substitutions which disrupted meaning. That is, the skill group less frequently self-corrected substitutions which were semantically and syntatically unacceptable. These results are summarized in Table 4.

Table 4 Percentages of self-corrections made on syntactically/semantically unacceptable (S/S_U) and syntactically/semantically acceptable (S/S_A) substitutions.

literature-based		skill-based	
% S/S U substitutions corrected	% S/S A substitutions corrected	% S/S_U substitutions corrected	% S/ S A substitutions corrected
74	27	61	39

DISCUSSION

Reading is a complex skill requiring the learner's attention to the many facets involved in processing print. Past research indicates that the development or stage of learning to read influences the focus of student's attention. At some stage beginning readers are thought to focus on graphophonic aspects of print to the exclusion of other aspects as they grapple with gaining control of the reading process (Biemiller, 1970). However, other research indicates that reading instruction plays a role in guiding students' attention. Thus far the accumulated evidence has left us with complex answers to the questions posed in this study (a) Do the students' reading concepts differ ? and (b) in what ways and to what extent do they differ? The present investigation explored first-grade, average readers' concepts in two essentially different instructional settings. Conclusions based on the results related to whether instruction or development in learning to read affects reading schemata are interpreted below.

Development and Instruction

The findings of this study indicate that both development in the stage of learning to read and instruction play a role in beginning readers' concepts. Similarities found in literature-based and skill-based students indicate that the influence of development in learning to read cuts across instructional contexts. This is concluded from the results of the structured interview and in part by the results of analysis of oral reading behaviors. Findings on these measures were consistent and revealed similar interest in and attention to decoding and surface or word level aspects of reading in children from literature-based and skill-based classrooms. In particular, the quantity and quality of interview responses from children in both groups

were extremely similar when they discussed 'sounding out' and 'learning and knowing words' as salient factors in reading. Students from both groups also used 'sounding out' as a reading strategy during oral reading. However, the skill group tended to rely more on decoding as a strategy than the literature group making more attempts to sound out words. The literature group had more success in sounding out and more often used other reading strategies in addition to sounding out words.

Past reading research helps substantiate the theory that attention to graphophonic aspects of print and "getting words" looms large during specific developmental stages of learning to read (Biemiller 1970; Chall, 1983; Mason, 1977). The responses of the children in this study add further support to this claim. These middle class, average readers in both literature-based and skill-based first grades indicated that they paid a good deal of attention to sounding out, knowing, and learning words. However, the results of the study also indicate that these beginning readers attended to and successfully used graphophonic relationships in print *whether or not their reading instruction focused on traditional, systematic teaching of phonic skills.* Indeed, one of the most salient differences between the literature-based and skill-based classrooms was the absence of traditional, systematic phonics instruction in the literature-based classrooms.

The results of this investigation are inconsistent with Biemiller's (1970) classic study. Findings suggest that the results of the Biemiller study may have been, in part, an artifact of instruction. This inference is made on the basis of the difference between the skill-based and literature-based students' knowledge and use of multiple cues including graphophonic, meaning, and language structure. Even though students in both groups were highly similar in the stage of development in learning to read, and other

significant variables were accounted for, their reading strategies differed. The literature-based group exhibited better balanced strategies, using meaning, structure, and visual cues, and a consistent search for meaning.

Differences in levels of metacognitive understandings. Past research has shown that metacognitive skills are correlated with age. Studies also indicate that factors such as socioeconomic status, reading ability, and in some instances, gender contribute to variances in metacognitive abilities. Primarily metacognitive skills have been shown to develop slowly with maturity (Baker & Brown, 1984; Brown, 1980; Clay, 1973; Markman, 1977; Meyers & Paris, 1978).

The results of the present study revealed interesting differences in metacognitive understandings between children who were very similar in variables known to effect this phenomenon. Findings indicate that metacognitive differences between the literature-based and skill-based students varied according to instruction. This conclusion is based on consistent trends across all three measures. In particular, the significant differences between the two groups' levels of rejection of incomprehensible print in altered passages indicate that the literature-based students held reading concepts which were strongly meaning-based i.e. they were more aware of the fact that their schemata for reading was "upset" when they read print which did not make sense. The literature group exhibited breadth in their understanding of the purpose and nature of reading during interviews, balance in their use of cues available in the text, and an active search for meaning as they read orally.

Implications for Schooling. Although findings in this study are not causal the results are of interest to educators. One such finding was the level of phonics known and used in both groups. The children in this study seemed very much aware of the importance of knowing and "getting" words. In spite of the fact that the literature-based students did not receive systematic phonics instruction they demonstrated attention to and expertise in phonics comparable or superior to that of the skill group.

Primary grade instruction must be concerned with students' learning about this important feature of written language; beginning readers' knowledge of speech/print relationships is a pivotal factor in learning to read. Importantly, phonics instruction must be alined or matched with learners' emerging understandings (Allen, et al. 1989; Dahl, Purcell-Gates & McIntyre, 1989; Dyson,1982). However, traditional first-grade systematic instruction in phonics may not be the most appropriate practice. Findings in the present investigation indicate that the literature-based instruction provided adequate graphophonic learning opportunities for these middle-class, average readers.

The results of the present investigation provides support for the claim that instruction makes a difference in students' reading schemata. The findings of the study show differences between the skill-based and literature-based students as reflected in their breadth of understanding, reading strategies, and metacognitive skills. As demonstrated in the results on the incomprehensible print presentations, children from the literature-based classrooms exhibited a stronger belief that print must make sense. In addition to the statistically significant differences in rejection rates, further support for this claim comes from the unexpected affective finding with the literature-based students' more frequent

occurrence of exhibition of humor and their spontaneously discussions about print which did not make sense. Behaviors such as these also showed a level of self-confidence in the literature group which is vital to success in school.

The theoretical orientations held by the literature-based (professed whole language) teachers enabled them to construct literate classroom environments in which the social aspects of learning to read were promoted and supported. Social interactions of the kind observed in these literature-based classrooms involved behaviors shown to support written language learning (Bissex, 1980; Harste, Woodward & Burke, 1984; Read, 1971). In particular, use of invented spellings is thought to be helpful in student's acquisition of the abstract knowledge of graphophonic relationships and the alphabetic principle. It is possible that the written language experiences and interactions available in the classrooms in this study provided opportunities for the literature group to solve the "written language puzzle" (Dyson, 1982). Other factors contributing to the literature group's expertise in decoding may have been their knowledge and use of multiple cueing systems (meaning and language structure) which, acting in concert, strengthened their graphophonic skills (Purcell-Gates, personal communicaton, spring 1988). The literature-based students in this study acquired useful phonics skills and knowledge and they achieved well balanced reading strategies and positive attitudes.

Suggestions for Research.

The present study did not test for a causal relationship. The conclusions drawn from this study are limited to the extent that the instrumentation and method can accurately reflect the reading concepts and

behaviors of young children. Understanding the cognitive processes of human beings is problematic; with this complexity in mind the investigation carefully combined several sources of data and utilized a degree of intuitive information subject to individual interpretations. While there is a 'general difficulty' in uncovering reading concepts and processes, the method, instruments, and techniques used in the present investigation were appropriate for the design of the study.

Longitudinal investigations which follow students of varying reading abilities through several years of skill-based and literature-based instruction are needed to further the knowledge base of children's acquisition of reading concepts. In addition, studies of at-risk student populations should be studied in these two instructional settings. Ethnographic investigations (which include home study components) of beginning readers' concepts and reading behaviors would be valuable. Such studies could incorporate a focus on individual children as well as groups. The present study indicates that both development and instruction influence literacy learning. Additional knowledge of children's responses to various instructional factors including specific contexts within individual classrooms should be done if research is to clarify the reported mismatch between instruction and student's concepts about written language.

References

Adams, M. J., & Collins. (1977). A Schema-theoretic view of reading. (Report No. 32). Urbana Illinois: Center for the Study of Reading. (ERIC Document Reproduction Services NO. ED 142 971).

Allen, J., et al. (1989). Reading and writing development in whole language kindergartens. In J. M. Mason (Ed.), Reading and writing connections. (pp 121-146) Needham Heights, MA. Allyn Bacon.

Anderson, J. R. (1976). Language memory and thought. Hillsdale, N. J.: Lawrence Erlbaum.

Anderson, R. C. (1977). Schema directed processes in language comprehension. (Report No. 50) Urbana Illinois: Center for the Study of Reading. (ERIC Document Reproduction Services No. ED 1422877).

Baker, L. & Brown, A. L. (1984). Metacognitive skills and reading. In P. D. Pearson (Ed.), Handbook of reading research. (pp. 353-394). New York: Longman.

Barr, R., (1972). The influence of instructional conditions on word recognition errors. Reading Research Quarterly, 7 (3), 509-529.

Barr, R., (1974-75). The effect of instruction on pupil reading strategies. Reading Research Quarterly. 10 (4), 555-582.

Bransford, J. D., (1979). Human cognition, learning, understanding and remembering. Blemont, California: Wadsworth.

Brown, A. L., (1980). Metacognitive development and reading. In R. J. Spiro, B. C. Bruce, & W.F. Brewer (Eds.), Theoretical issues in reading comprehension. (pp. 453-481). Hillsdale, N. J.: Lawrence Erlbaum.

Biemiller, A.,(1970). The development of the use of graphic and contextual information as children learn to read. Reading Research Quarterly, 6 (1), 75-96.

Bissex, G., (1980). Gnys at Wrk: A child learns to write and read. Cambridge: Harvard University Press.

Burke, C. L., (1980). The reading interview (1977). In B.R. Farr & D. Strickler, (Eds.), Reading comprehension handbook. (pp 68-77). Bloomington, IN.: Indiana University Press, Language Education Department.

Canney, G., & Winograd, P., (1979). Schemata for reading and reading comprehension performance. (Report No 120). Urbana Illinois: Center for the Study of Reading. (ERIC Document Reproduction Services No. ED 169 520).

Chall, J., (1983). Learning to read: The great debate. Updated edition. New York: McGraw-Hill.

Clay, M. M., (1973). Reading: the patterning of complex behavior. Portsmouth, N. H.: Heinemann.

Clay, M. M., (1979). The early detection of reading difficulities. Portsmouth, N. H.: Heinemann.

Clymen, E. (1983). A spring hat. In B. J. Weiss, E.L. Everetts, L. O. Steuer, S. Craiksham, & L.C. Hunt (Eds.) A time for friends. (pp. 63-66). New York, N.Y.: Holt, Reinhart, & Winston.

Cohen, A. S., (1974-75). Oral reading errors of first-grade children taught by a code emphasis approach. Reading Research Quarterly, 10 (4), 615-650.

Dahl, K. L., Purcell-Gates, V., & McIntyre, E., (1989). Ways that inner-city children make sense of traditional reading and writing instruction in the early grades. (Grant Award No. G008720229) Final report to the Office of Educational Research and Improvement. U.S. Department of Education.

DeFord, D. E., (1979). A validation study of an instrument to determine a teacher's theoretical orientation to reading instruction. Unpublished dissertation. University of Indiana. Bloomington, IN.

DeFord, D. E., (1984). Classroom context for literacy learning. In Taffy E. Raphael (Ed.) The contexts of school based literacy. (pp.163-182). New York, N.Y.: Random House.

DeLawter, J. A., (1970). Oral reading errors of second-grade children exposed to two different reading approaches. Unpublished dissertation, Columbia University. New York, N.Y.

Denny, T., & Weintraub, S., (1963). Exploring first-graders' concepts of reading. The Reading Teacher, 16, 363-365.

Denny, T., & Weintraub, S., (1966). First-graders' responses to three questions about reading. Elementary School Journal, 66, 441-448.

Downing, J., (1973). A summary of evidence related to the cognitive clarity theory of reading, In P.L. Nacke (Ed.) (pp. 178-184). Diversity on mature reading: Theory and research, vol. 1, Twenty Second Yearbook of National Reading Conference.

Downing, J., (1978). The psycholinguistic basis of cognitive clarity. Paper presented at the annual meeting of the National Reading Conference. St. Petersburge, Florida. (ERIC Document Reproduction Services No. ED 170 689).

Downing, J., Ollia, L., (1975). Olive, P., (1977). Cultural differences and conceptual factors in learning to read. British Joural of Educational Psychology, 45, 312-316.

Downing,J., Ollia, L., & Olive, P., (1977). Concepts of language in children from differing socioeconomic bachgrounds. Journal of Educational Research, 70, 277-181.

Dyson, A. H., (1982). Reading, writing, and language: Young children solving the written language puzzle. Language Arts, 59 (8), 204-214.

Edwards, D., (1962). Teaching beginners the purpose of reading. Elementary English, 39 (March), 194-215.

Gibson, E., & Levin, H. (1978). The psychology of reading. Cambridge, MA.: MIT Press.

Goodman, K., Smith, E. B., Meredith, R., & Goodman, Y. (1987) Language and thinking in school: A whole language curriculum. New York, N Y: Richard C. Owen.

Harste, J. C., Woodward, V. A., & Burke, C. L. (1984). Language stories and literacy lessons. Portsmouth, N. H.: Heinemann.

Johns, J. & Ellis, D. (1976). Reading: Children tell it like it is. Reading World, 16 (2), 115-12

LaBerge, D. & Samuels, S. J. (1985) Toward a theory of automatic information processing (1974). In H. Singer & R. B. Ruddell (Ed.s), Theoretical models and processes of reading (pp.689-718). Newark, DL. International Reading Association.

Markman, E. M. (1977). Realizing that you don't understand: A preliminary investigation. Child Development, 48, 987-992.

Mason, J. M. (1977). Reading readines: A definition and skills hierarchy from preschoolers' developing conceptions of print. (Report No. 59). Urbana, Ill.: Center For the Study of Reading. (ERIC Document Reproduction Services No. ED 145 403).

Meyers, M. & Paris, S. G. (1978). Children's metacognitive knowledge about reading. Journal of Educational Psychology, 70 (5),680-690.

Miles, M. B. & Huberman, A. M. (1984). Analysis: A source book of new methods. Beverly Hills CA: Sage

Moss, R. K. (1983). Transactions among teachers and children: Instructional behavior and the writing process during classroom writing episodes. Unpublished dissertation. Texas A & M University. College Station, TX.

Napjas, A. J. (1983). Freddy finds a frog. In B. J. Weiss, E.L. Everetts, L. O. Steuer, S. Craiksham, & L.C. Hunt (Eds.) People need People. New York, N.Y.: Holt, Reinhart, & Winston.

Posner, M. I., & Snyder, C. R. R. (1975). Attention and cognitive control. In R. L. Solso (Ed.) Information and cognition. (pp 32-67) Hillsdale, N.J.: Lawrence Erlbraum.

Read, C. (1971). Pre-school children's knowledge of English phonology. Harvard Educational Review. 41, 1-34.

Schneckner, P. J. (1976). The concepts of selected first and third grade children and the relationship of these concepts to the children's intelligence and reading achievement. Unpublished dissertation, University of Northern Colorado. Greeley, CO

Smith, F. (1986). Understanding reading. Hilsdale, N.J.: Lawrence Erlbaum.

Stanford Achievement Test. (1982). Reading Comprehension: Primary. The Psychological Corporation. Harcourt Brace Jovanovich.

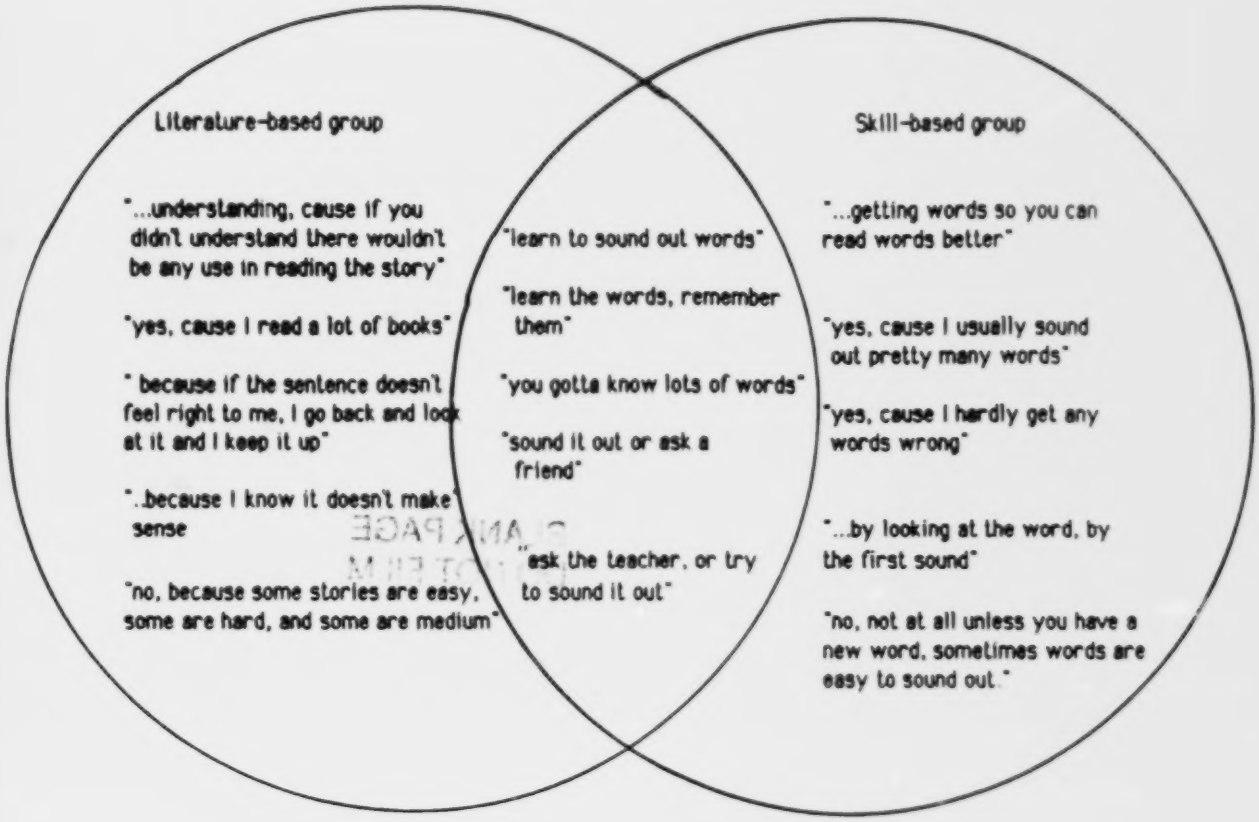
Literature-based group
"...understanding, cause if you didn't understand there wouldn't be any use in reading the story"
"yes, cause I read a lot of books"
" because if the sentence doesn't feel right to me, I go back and look at it and I keep it up"
"..because I know it doesn't make sense
"no, because some stories are easy, some are hard, and some are medium"
"learn to sound out words"
"learn the words, remember them"
"you gotta know lots of words"
"sound it out or ask a friend"
"ask the teacher, or try to sound it out"
Skill-based group
"...getting words so you can read words better"
"yes, cause I usually sound out pretty many words"
"yes, cause I hardly get any words wrong"
"...by looking at the word, by the first sound"
"no, not at all unless you have a new word, sometimes words are easy to sound out."

Figure 1. Interview responses typical of literature-based students and skill-based students and responses common to both groups of students